United States
Environmental Protection
Agency

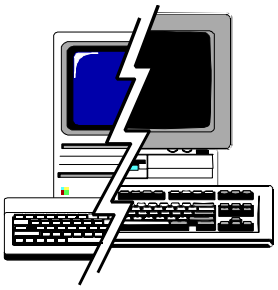
Pollution Prevention
and Toxics
(7407)

Summer 1995
EPA 749-R-95-002

EPA

Chemicals in the Environment

Public Access Information



Contents

Welcome Message

Linda A. Travers, Director, *Information Management Division*

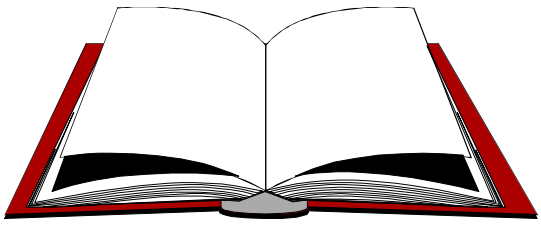
The United States Environmental Protection Agency (EPA) maintains a wide range of environmental information. Some of this information tells us what chemicals and pollutants are released by industrial plants. Other information tells us about the health and environmental effects of chemicals. Still other information tells us what chemicals people may be exposed to.

EPA believes that it is in everyone's interest to make this information available to the public. "Public" here includes industry, state governments, community groups, environmental groups, and, of course, public citizens. Access to information is the best way to ensure everyone has the opportunity to evaluate and reduce environmental and health risks.

To make this information accessible, the Office of Pollution Prevention and Toxics (OPPT) within EPA provides a variety of information services and products. These include call-in hotlines, publications, diskettes with data, CD-ROMs, and access to on-line databases.

This publication is one way for you to find out about EPA's information products related to chemicals. The first edition of the *Chemicals in the Environment: Public Access Information* provides information on a number of major OPPT products and services that reflect the scope of our programs. We hope to reach a wide audience to let you know what information products are available, what they can do for you, and how to get them.

We would like to know if this publication is helpful to you. Please direct your comments or questions to the editor, Randall Brinkhuis (see page 2 for his mailing and Internet addresses).



The New Chemicals Program: Gatekeeper to Prevent Unreasonable Risks

David Di Fiore, *Chemical Control Division*

Imagine that you had the opportunity to redesign the way the country goes about protecting the environment and human health. One important focus would certainly be hazardous chemicals—those currently made and in use, but also, and perhaps more importantly, those that have been developed but not yet manufactured commercially and released into the environment. It is within this latter group that the best opportunities exist to prevent pollution and harm, before a single worker or consumer is exposed to a chemical and before a single kilogram enters the environment. It is preventive action at this juncture that should avert the catastrophic effects of a new dioxin- or PCB-like compound.

Chemicals in the Environment: Public Access Information is published by EPA's Office of Pollution Prevention and Toxics (OPPT) to increase public access to and awareness of information on toxic chemicals and pollution prevention available through OPPT.

This resource is also accessible through the EPA Gopher at **gopher.epa.gov**. It is located under EPA Offices and Regions/Office of Prevention, Pesticides and Toxics/Toxic Substances/Chemicals in the Environment: Public Access Bulletin. (The EPA Gopher's menu structure will be undergoing some changes. In the event that this publication is no longer located there, use the Jughead index tool to search for it.)

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Fortunately, the drafters of the Toxic Substances Control Act (TSCA) had the good sense and foresight to realize the importance of placing a gatekeeper between the laboratory and the commercial marketplace. That gatekeeper is the New Chemicals Program (NCP).

The New Chemicals Program reviews new chemical notices to determine whether the manufacture, processing, distribution in commerce, use or disposal of a substance may present an unreasonable risk to human health or the environment.

The NCP derives its authority from Section 5 of TSCA, which requires all manufactures or importers of "new" chemicals to file a notice with the EPA 90 days prior to commercial activity (or to file a request for an exemption to the 90-day notice requirement). A simplified definition of a "new" chemical under TSCA is one made or brought into the U.S. after 1977 — when the "existing" chemical inventory was established — and one not specifically regulated under another statute (like those that apply to pesticides or drugs).

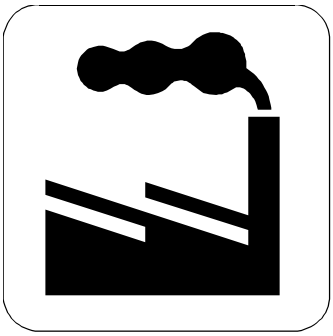
The NCP reviews the new chemical notice to determine whether the manufacture, processing, distribution in commerce, use or disposal of the substance may present an unreasonable risk to human health or the environment. The program's assessment includes exposures and risks to workers, consumers and the general population (for example, from drinking water or fish consumption), as well as risks to wildlife, including endangered species. From its inception in 1979, the program has reviewed over 26,000 new chemical notices and exemption applications and taken action to control potential unreasonable risks associated with approximately 10% of those chemicals.

A brochure and additional information on the New Chemicals Program are available through the EPA TSCA Assistance Information Service at (202) 554-1404. If you have additional questions about the program, contact David Di Fiore at (202) 260-3374, fax (202) 260-0118.

Chemicals in the Environment: OPPT Chemical Fact Sheets

Randall Brinkhuis, *Information Management Division*,
and Richard Wormell, *Chemical Screening and Risk Assessment Division*

Chemicals can be released to the environment as a result of their manufacture, processing, and use. EPA has developed a series of fact sheets and chemical summaries to describe how you might be exposed to selected chemicals, how exposure to them might affect you and the environment, what happens to them in the environment, and whom to contact for additional information. EPA is committed to reducing environmental releases of chemicals through source reduction and other practices that reduce creation of pollutants.



Each Fact Sheet is also accompanied by a Chemical Summary (a technical support document that provides detailed technical information on the chemical named in the Fact Sheets).

The initial goal of this project was to provide summaries that would supplement information on the environmental release of Toxics Release Inventory chemicals. The Fact Sheets are also intended to provide the public with information on other chemicals under assessment by the Office of Pollution Prevention and Toxics.

The first set of fact sheets has been completed for:

Acetaldehyde	Methyl ethyl ketone
Acetonitrile	Methyl isobutyl ketone
Acrylamide	Methyl-tert-butyl ether
Acrylic acid	Methylchloroform (a.k.a.
1-Butanol	1,1,1-Trichloroethane)
Carbon disulfide	Methylene chloride (a.k.a.
Carbonyl sulfide	Dichloromethane)
Chlorine	2-Methoxyethanol
Cyclohexane	Perchloroethylene
Freon 113	Toluene
Methanol	1,2,4-Trimethylbenzene

Fact sheets for another forty chemicals are being prepared.

Copies of the Fact Sheets for the first set of chemicals are available from the TSCA Assistance Information Service, (202) 554-1404. They are also accessible electronically on the Right-to-Know Network; dial in via modem at (202) 234-8570 or telnet to **rtk.net** (login as "public") for Internet access. The Fact Sheets and Chemical Summaries are also available on the EPA Gopher (**gopher.epa.gov**) under:

EPA Office and Regions/ Office of Prevention, Pesticides and Toxic Substances / Toxic Substances / Chemicals in the Environment: OPPT Chemical Fact Sheets.

Toxic Substances Control Act (TSCA)

The Toxic Substances Control Act was enacted by Congress in 1976. To ensure wise and informed decision-making by the government, TSCA gives EPA authority to gather certain kinds of basic information on chemical risks from those who manufacture, process, import, or distribute chemicals. The law also enables EPA to require companies to test selected existing chemicals for toxic effects, and requires the Agency to review most new chemicals before they are manufactured.

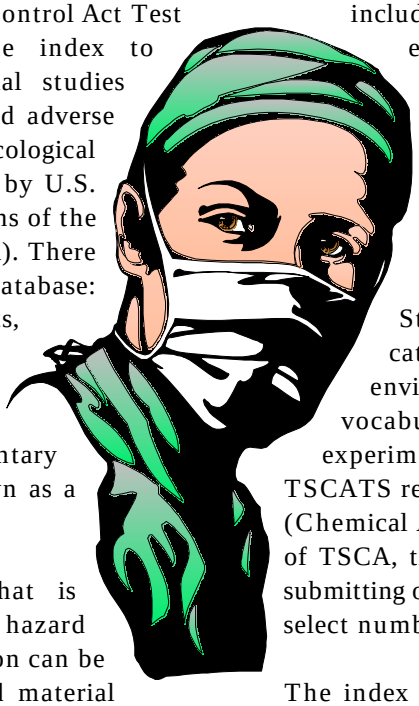
To prevent unreasonable risks, EPA may select from a broad range of control actions under TSCA, from requiring hazard-warning labels to outright bans on the manufacture or use of especially hazardous chemicals. Under TSCA, EPA may regulate a chemical's unreasonable risks at any stage in its lifecycle: the manufacturing, processing, distribution in commerce, use, or disposal.

A more complete description of TSCA can be found in *The Layman's Guide to the Toxic Substances Control Act*. Copies of that publication, the law itself, and other publications dealing with TSCA are available from the TSCA Assistance Information Service, (202) 554-1404.

Health and Safety Studies

Toxic Substance Control Act Test Submissions (TSCATS)

Geraldine Nowak, *Information Management Division*



TSCATS (Toxic Substances Control Act Test Submissions) is an online index to unpublished, nonconfidential studies covering chemical testing results and adverse effects of chemicals on health and ecological systems. The studies are submitted by U.S. industry to EPA under several sections of the Toxic Substances Control Act (TSCA). There are four types of documents in the database: Section 4 chemical testing results, Section 8(d) health and safety studies, Section 8(e) substantial risk of injury to health or the environment notices, and voluntary documents submitted to EPA known as a For Your Information (FYI) notice.

TSCATS contains information that is pertinent to the risk assessment and hazard evaluation processes. The information can be used in conjunction with published material and is a valuable source along with or in the absence of published data. The data are used by federal and state agencies, researchers, toxicologists, risk assessors, the regulated industry, attorneys, trade and professional associations.

TSCATS was developed to make ongoing and completed chemical testing studies available to the public and includes chemical exposure studies, epidemiology, environmental fate, monitoring, episodic incidents, such as spills and case reports. More than 23,000 documents contain over 81,000 studies on 6,700 unique chemical substances. On average three or four individual studies are extracted from each document.

Studies are indexed under three broad categories: health effects, ecological effects and environmental fate. Additional controlled vocabulary terms are assigned to describe the experimental protocol and test observations. A TSCATS record also includes: the chemical name, CAS (Chemical Abstracts Service) Registry Number, Section of TSCA, title, document number, microfiche number, submitting organization, and performing organization. A select number of studies also have abstracts.

The index is accessible through a variety of electronic formats (see sidebar). The full text of the studies is available on microfiche from Chemical Information Systems or the National Technical Information Service. Each study is referenced by a microfiche number which is necessary when ordering the full-text document.

EPA contact: Geraldine Nowak, (202) 260-2320. Internet address: **nowak.geraldine@epamail.epa.gov**.

Electronic Access to TSCATS

On-line System	Filename	Phone #
National Library of Medicine	TOXLINE	(301) 496-6193
Chemical Information Systems	TSCATS	(800) CIS-USER
Dialog Information Services	File 156	(800) 3-DIALOG
STN International	TOXLIST	(614) 421-3600

(Note: All of the above services charge for accessing their files.)

CD-ROM

SilverPlatter (TOXLINE), (617) 235-1715

Magnetic Tape

National Technical Information Service, (703) 487-4650

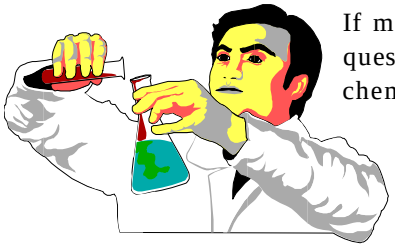
Notices of Significant Health Risks

8(e) Triage Chemical Studies Database Product

Charles Freeman, *Information Management Division*

In order to help reduce the risks of chemicals in the environment, EPA recognizes the importance of providing the public with access to the information collected under environmental laws.

Under Section 8(e) of the Toxic Substances Control Act (TSCA), manufacturers, importers, and distributors of chemical substances and mixtures are required to inform EPA of studies conducted that reasonably support the conclusion that the chemicals present a "substantial risk of injury" to human health or the environment. One intended use of this information is to make it accessible to the general public and organizations whose efforts are associated with protection of health and safety.



If members of a community question whether certain chemicals being released in their community are of significant health risk, information collected under Section 8(e) could assist in their research efforts. EPA has developed a user-friendly database to serve as a vehicle for sharing this 8(e) submission information.

In 1991, OPPT initiated the Compliance Audit Program (CAP). The CAP was a voluntary program that encouraged companies to audit their files for information that was required by 8(e). It provided reduced monetary penalties for companies submitting studies that were past the statutory submittal deadline. EPA received about 10,000 submissions under the CAP, in addition to the approximately 400 non-CAP 8(e)s the Agency receives each year.

The Database includes the majority of the CAP and non-CAP submissions received after 1991. Version 1.0 of the Database, released in October 1993, consisted of approximately 6,000 studies which had been reviewed to date. The most recent version of the Triage Database, released February 1995, includes an additional 4,000 studies that have recently been reviewed by EPA for a total of 10,000 studies. The revised version also provides a more user-friendly installation. In addition, selected Section 8(e) chemicals are the subject of OPPT Chemical Fact Sheets (see page 3). These chemicals have their Fact Sheets included in the Database to provide the user with more information about them. As Fact Sheets for additional 8(e) chemicals are completed, they too will be incorporated into the Database.

To use Triage on your computer you must have the following:

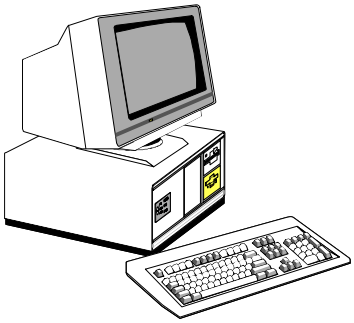
- IBM PC or compatible (286 processor or better);
- DOS Version 3.1 or higher; and
- 45 megabytes of free space on the hard drive.

EPA is considering having the third version of the 8(e) Triage Program available on CD-ROM due to the increased memory that will be needed to run future versions.

To receive a copy of the most recent version (2.0) of the 8(e) Triage Program please call the TSCA Hotline at (202) 554-1404. In addition, the Database was recently made available through the Internet on the EPA Gopher (address: **gopher.epa.gov**). Three files and instructions on downloading the files are provided. The 8(e) Triage files are presently found on the EPA Gopher by choosing the following path:

EPA Offices and Regions/ Office of Prevention, Pesticides and Toxic Substances/ Toxic Substances/ 8(e) Triage Chemical Studies Database

For more information on the Triage Database, contact Chuck Freeman at (202) 260-8918 (Internet address: **freeman.charles@epamail.epa.gov**).



Lead in the Environment

Karen Hoffman, *Chemical Management Division*

About one in eleven children in America have high levels of lead in their blood, according to the Centers for Disease Control and Prevention. You may have lead around your building without knowing it because you can't see, taste or smell lead. You may have lead in the dust, paint or soil in and around your home, or in your drinking water or food. Because it does not break down naturally, lead can remain a problem until it is removed.

The long term effects of lead in a child can be severe. They include learning disabilities, decreased growth, hyperactivity, impaired hearing, and even brain damage. If caught early these effects can be limited by reducing exposure to lead or by medical treatment. There are simple things you can do to help protect your family from the hazards of lead poisoning. The National Lead Information Center's hotline and clearinghouse can provide you with useful information.

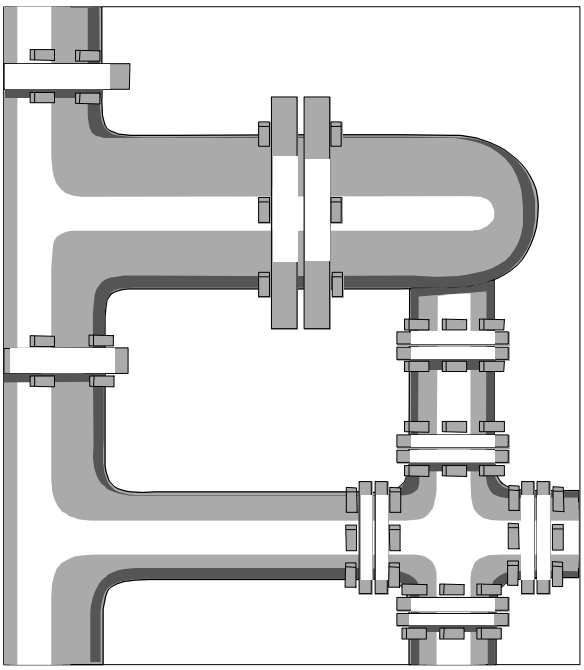
The National Lead Information Center (NLIC) is sponsored jointly by the non-profit National Safety Council and EPA, with support from three other federal agencies: Centers for Disease Control and Prevention (CDC), Department of Housing and Urban Development (HUD), and Department of Defense. The NLIC includes a hotline and clearinghouse which provide the general public and professional audiences with information about lead poisoning and prevention.

When a caller phones the 24-hour National Lead Hotline, (1-800-LEAD-FYI), they hear a recorded message - in either English or Spanish - asking them to leave their name and address. Callers receive a free packet of information including four lead fact sheets, a list of state and local lead contacts and a pamphlet entitled “Lead Poisoning and Your Children.”

Callers with specific questions are referred to the National Lead Clearinghouse (1-800-424-LEAD) where they may speak with an information specialist in either English or Spanish. Hours are Monday through Friday 8:30 a.m. - 5:00 p.m.

The clearinghouse provides callers with relevant informational materials including federal publications, selected journal articles and updates of federal laws and regulations. Also available is information on qualified laboratories, referrals to federal, state and local agencies, EPA Regional Lead Training Centers (RLTCs) and EPA regional lead contacts.

Other services provided by the Center include a lead education video lending library and a lead speakers bureau for community, school or church groups. Posters are available free of charge.



Obtaining Information on Asbestos

Robert Jordan, *Chemical Management Division*

EPA's asbestos message, most clearly enunciated in 1990 and the years since, can be stated rather simply:

- Asbestos is a problem because, as a toxic substance and a known carcinogen, it can cause several serious diseases in humans. Symptoms of these diseases typically develop over a period of years following asbestos exposure.
- Asbestos-containing materials (ACM) in buildings do not *always* pose a problem (that is, a hazard) to occupants and workers in those buildings. *When* can ACM become a problem? When asbestos fibers get into the air and are inhaled; that is, when there is human exposure.
- Intact, undisturbed asbestos-containing materials generally do not pose a health risk. They may become hazardous and pose increased risk when they are damaged, are disturbed in some manner, or deteriorate over time and thus release asbestos fibers into building air.
- EPA's asbestos program for schools (AHERA) and its guidance for other building owners is founded on "in-place management of ACM." This approach is designed to keep asbestos fiber levels low by teaching people to recognize asbestos-containing materials and actively manage them.

In general, the Agency's major asbestos regulations were promulgated under authority of the Toxic Substances Control Act (TSCA) or under the Clean Air Act (CAA). TSCA regulations and guidance are administered and managed by the Office of Pollution Prevention and Toxics (OPPT), while the CAA regulations are the responsibility of the Office of Air and Radiation (OAR). Information on EPA's asbestos regulations, interpretive documents, and guidance materials are available to the public and the regulated community through a variety of sources.

The TSCA Assistance Information Service, (202) 554-1404, provides TSCA regulation (including asbestos) information, copies of regulations, Agency guidance documents, and referrals to more specific sources of information (for example, Regional Asbestos/NESHAP Coordinators), as needed. Homeowners can obtain a copy of the pamphlet "Asbestos in the Home" from this source.

The Asbestos Ombudsman Clearinghouse/Hotline, (800) 368-5888 (in the Washington metropolitan area dial (703) 305-5938), provides general asbestos information to the public. Operated by EPA's Small Business Ombudsman's Office, it also assists small businesses in complying with EPA regulations.

EPA's Public Information Center, (202) 260-2080, is an additional information resource, although its coverage is quite broad, and not specifically focused on asbestos program information.

The Toxic Substances Control Act Assistance Information Service (T.A.I.S.)

Wanda Woodburn, *Environmental Assistance Division*

The T.A.I.S., or the "TSCA Hotline," operating under contract to EPA, provides technical assistance and information about programs under the Toxic Substances Control Act (TSCA), including the Asbestos School Hazard Abatement Act (ASHAA), the Asbestos Hazard Emergency Response Act (AHERA), and the Lead Exposure Reduction Act.

The TSCA Hotline is staffed by professionals trained to answer technical questions about TSCA, ASHAA, AHERA, the Lead Exposure Reduction Act, and some Pollution Prevention activities, including the 33/50 Program. The Hotline can be reached at (202) 554-1404, Monday through Friday, from 8:30 a.m. to 5:00 p.m. (Eastern time).

The Hotline stocks TSCA-related documents, including *Federal Register* notices, reports, and information brochures and booklets. These are available free of charge, and may be requested during business hours by phoning the Hotline, or by fax at any time to (202) 554-5603.

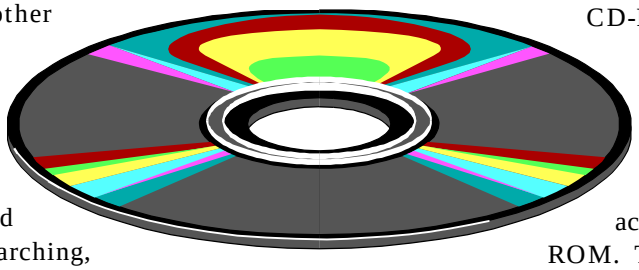
Anyone with questions about these activities may contact the Hotline for information and assistance.

TRI Helps Communities Help Themselves

Jan Erickson, *Information Management Division*

In 1984, a deadly cloud of methyl isocyanate killed thousands of people in Bhopal, India. This and other incidents underscored demands by industrial workers and communities in several states for information on hazardous materials. In response to rising public concern, Congress passed the Emergency Planning and Community Right-to-Know Act (EPCRA) requiring U.S. manufacturers to report amounts of toxic chemicals released into the environment. The resulting database became known as the Toxics Release Inventory (TRI).

In keeping with Congressional intent in passing the legislation, EPA endeavored to make the Inventory widely available to citizens groups, labor organizations, academia, the media and other potential users. A variety of information products were developed, ranging from printed reports highlighting particular facets of the Inventory to CD-ROMs and online systems for searching, displaying, and downloading records electronically. More recently, TRI data has been available on the Internet. (For more information, contact the TRI User Support Service at (202) 260-1531.)



Outreach activities, by both EPA and public interest groups, were also very successful in raising public awareness of TRI. Communities began to use TRI to initiate dialogues with local facilities to encourage manufacturers to reduce their emissions, develop pollution prevention plans, and improve safety measures. Labor organizers used TRI as a basis for discussions with employers regarding safety in the work place. National, state and local officials are now using TRI to identify the most pressing environmental problems and set priorities for addressing them. Most importantly, reporting facilities themselves use the data to identify opportunities to prevent pollution and set goals for reducing toxic chemical emissions.

And what has been the result of all this attention? TRI has become a powerful force for reducing pollution! Analyses reveal that toxic chemical releases have declined dramatically since the inception of TRI. A number of voluntary programs for reducing chemical emissions have sprung up at the local, state, and national levels. In many states, TRI provided the impetus for passage of legislation requiring facilities to engage in pollution prevention planning. TRI was expanded to include Federal facilities, additional chemicals, and to require reporting of additional data.

Environmental Education Project

Kathy Hogan, *Information Management Division*

The Information Management Division has launched an office wide educational strategy that seeks to place Office of Pollution Prevention and Toxics (OPPT) products and services in an educational context for students in grades seven through twelve. The first education product, in its review and comment stage, features the Toxics Release Inventory (TRI) CD-ROM as its centerpiece. In coordination with the National Science Teachers Association (NSTA), we are developing a series of cross-curriculum teachers guides and student activities featuring the TRI CD-ROM. This project brings together two good objectives: The NSTA was searching for a platform for introducing and encouraging the use of large data banks in the classroom as a tool for education, and OPPT has an ongoing objective to find ways of providing meaningful public access. The use of the TRI CD-ROM as an educational tool will satisfy both objectives, and encourage public understanding and appreciation of the environmental usefulness of the TRI.

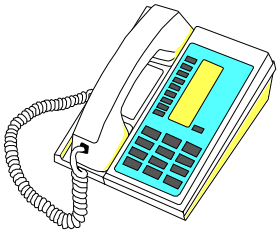
In addition to the TRI CD-ROM, the educational package under review includes a videotape presenting several top environmental videos about the Toxics Release Inventory and other chemical subjects, and a number of additional materials that highlight OPPT's environmental protection activities. A group of educators and other interested parties will review EPA materials and design a cross-curriculum teaching guide and student activities manual. The NSTA will distribute the final product, including the teaching guide and student manual.

For more information about OPPT's Environmental Education project, contact Kathy Hogan at (202) 260-9349, fax: (202) 260-4659, or at U.S. EPA, OPPT (Mailcode 7407), 401 M St., SW, Washington, DC 20460.

The EPCRA Hotline: Your Source for Information on the Emergency Planning and Community Right-to-Know Act

Tamara McNamara,
Environmental Assistance Division

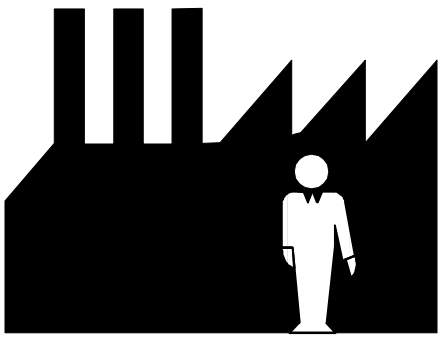
In November of 1986, Congress enacted the Emergency Planning and Community Right-to-Know Act (EPCRA), also known as Title III of the Superfund Amendments and Reauthorization Act (SARA Title III), to help communities prepare for chemical emergencies and grant citizens and government officials access to information about potential chemical hazards.



The EPCRA Hotline is a publicly accessible service that provides up-to-date information on EPCRA and related programs, such as the Accidental Release Prevention Provisions of the Clean Air Act. Topics commonly addressed include: emergency planning, hazardous chemical inventory reporting, public access to chemical information, toxic chemical release reporting, and the toxic chemical inventory database.

The Hotline responds to factual questions regarding EPCRA and also responds to requests for related documents. Anyone can call the Hotline. It offers information to a broad audience, including private citizens. If a question is not within the scope of the Hotline's services, the information specialists attempt to refer the question to the appropriate service.

The Hotline can be reached by calling toll-free: 1-800-535-0202, Monday-Friday, 8:30 a.m. - 7:30 p.m. EST. The Hotline is closed on Federal Holidays.



Public Hotlines and Clearinghouses referred to in this publication

EPA Programs

Asbestos Ombudsman Clearinghouse/ Hotline, (800) 368-5888 or (703) 305-5938

Center for Environmental Research Information (CERI), (513) 569-7562

Emergency Planning and Community Right-to- Know Act Hotline, (800) 535-0202; in the Washington, DC, metropolitan area, (703) 920-9877

Pollution Prevention Information Clearinghouse, (202) 260-1023

Public Information Center, (202) 260-2080

33/50 Program, (202)260-6907

Toxic Substances Control Act Assistance Information Service (TSCA Hotline), (202) 554-1404

TRI User Support, (202) 260-1531

Other numbers

National Lead Clearinghouse, (800) 424-LEAD

National Lead Hotline, (800) LEAD-FYI

National Library of Medicine (TOXLINE), (301) 496-6193

National Technical Information Service (NTIS), (703) 487-4650

Voluntary Pollution Prevention Programs

The 33/50 Program

John Leitzke, *Chemical Control Division*

The 33/50 Program is an EPA voluntary pollution prevention initiative. It derives its name from its overall goals - an interim goal of a 33% reduction by 1992 and an ultimate goal of a 50% reduction by 1995 in emissions of 17 high-priority toxic chemicals. EPA used the 1988 Toxics Release Inventory (TRI) reporting data as a baseline.

TRI information for 1988 indicated that 12,800 facilities reported 1.489 billion pounds of 33/50 Program chemicals directly released to the environment or transferred off-site to waste management facilities. The aim of the 33/50 Program is to reduce this 1.489 billion pounds of pollution by at least 50% — 745 million pounds — by 1995, with an interim target of more than 496 million pounds by 1992.

1991 TRI reporting data indicates that releases and transfers of 33/50 Program chemicals declined by 32.8% between 1988 and 1991, just shy of the Program's 1992 interim 33% national reduction goal a full year ahead of schedule. By 1993 these figures had declined by 46%, very close to the 1995 goal.

From an initial voluntary participation of several hundred companies, the 33/50 Program now includes over 1,200 companies, and more are being contacted and pledging voluntarily to reduce pollution each month.

EPA has a wide range of information and services on pollution prevention technologies including: ***(1)*** nearly 20 company profiles that summarize successful programs at industrial facilities; ***(2)*** a generic waste reduction manual, the Facility Pollution Prevention Guide; ***(3)*** nearly 20 industry-specific Guides to Pollution Prevention; ***(4)*** supplementary information in progress reports, handbooks, reference manuals, bibliographic reports, and videos; ***(5)*** seven Manufacturing Technology Centers across the nation for research and training; ***(6)*** a variety of conferences and workshops held each year; ***(7)*** state programs for grants and awards; and ***(8)*** several Hotlines: (a) the TSCA Hotline at (202) 544-1404, (b) the EPA Center for Environmental Research Information in Cincinnati, OH, at (513) 569-7562, and (c) the Pollution Prevention Information Clearinghouse at (202) 260-1023. The Clearinghouse may also be reached using a personal computer modem via Enviro$ense, a free computer bulletin board system on environmental issues, at (703) 908-2092. The 33/50 Program may also be reached directly at (202) 260-6907.

The 17 high priority toxic chemicals included in the 33/50 Programs are: Benzene, Cadmium and compounds, Carbon tetrachloride, Chloroform, Chromium and compounds, Cyanides, Dichloromethane, Lead and compounds, Mercury and compounds, Methyl ethyl ketone, Methyl isobutyl ketone, Nickel and compounds, Tetrachloroethylene, Toluene, 1,1,1-Trichloroethane, Trichloroethylene, and Xylenes.

Design for the Environment: Partnerships for a Cleaner Future

Joe Breen, *Economics, Exposure and Technology Division*

The Design for the Environment (DfE) Program is a cooperative, voluntary effort by EPA, industry, professional organizations, state and local governments, other federal agencies (including the Small Business Administration), and the public aimed at developing specific pollution prevention information primarily for small-and medium-sized businesses.

DfE is working with a number of small business-dominated industries including printing (screen printing and lithography), dry cleaning, and electronics/printed wiring boards. Specifically, the DfE Program uses its industry projects to bring together comparative information on the environmental and human health risks, exposures, performance and costs of alternative products and technologies so that small businesses can

make more informed environmental decisions. The DfE Program realizes that small businesses often do not have the resources or technical expertise to develop this kind of technical information on their own.

DfE Screen Printing and Lithography Projects

- The screen printing sector of the printing industry is comprised of approximately 40,000 small businesses that employ an average of 15 people or fewer. The lithography sector of the printing industry is comprised of over 54,000 printers that are mostly small- and medium-sized businesses.

- In the DfE Screen Printing and Lithography Projects, EPA and industry are working together to identify alternative work practices, products, technologies, and pollution prevention options that are cost-effective and safer for workers and the environment.

- The DfE Screen Printing Project worked with the Small Business Administration (SBA) and the New Jersey Small Business Development Center to develop a pollution prevention video for screen printers entitled, "Saving Money and Reducing Waste."

    - The video introduces screen printers to pollution prevention concepts and provides specific, practical information on ways that they can incorporate pollution prevention into their processes.

- The DfE Screen Printing and Lithography Projects are working with SBA to facilitate the dissemination of DfE program information through SBA networks, especially the Small Business Development Centers.

DfE Dry Cleaning Project

- The DfE Dry Cleaning Project is working in partnership with this small-business dominated industry to reduce exposure to dry cleaning solvents by working to remove barriers and create incentives for dry cleaners to use alternative garment cleaning methods.

- To assess the viability of several alternative methods, DfE has launched demonstration shops in three cities — these sites will mirror typical dry cleaning shops, but will use alternative water-based technologies instead of solvents to clean clothes.

- The demonstration shops will provide dry cleaners with an opportunity to observe alternative cleaning processes under long-term, "real-world", conditions.

    - Performance, economic viability, and customer satisfaction will be evaluated and a training program will be conducted at the shops to instruct dry cleaning professional in alternative techniques, equipment, and quality control.

DfE Printed Wiring Board (PWB) Project

- The vast majority (90%) of the approximately 750 independent PWB manufacturers are small businesses with annual sales under $10 million.

- The United States' share of the PWB market has been declining during the last decade, in part due to the costs associated with more stringent environmental regulation in the U.S.

- The DfE PWB Project is working to identify and evaluate substitute materials, processes, and technologies for use in manufacturing PWBs so that PWB manufacturers can make informed technology choices, based on consideration of comparative risk, performance, cost, and competitiveness.

    - PWB manufacturers are highly motivated to identify pollution prevention opportunities for their industry and, if possible, to remove themselves from the scope of some regulations, particularly those that apply to hazardous wastes.

To obtain brochures, fact sheets, and other publications on Design for the Environment (DfE) projects, contact the EPA Pollution Prevention Information Clearinghouse, (202) 260-1023.

The Pollution Prevention Information Clearinghouse

Beth Anderson, *Pollution Prevention Division*

The Pollution Prevention Information Clearinghouse (PPIC) is a free, nonregulatory service of the United States Environmental Protection Agency established in response to requirements in the Pollution Prevention Act of 1990. PPIC provides several services: document distribution, reference and referral telephone service, and access to a special collection of pollution prevention materials.

The objectives of the clearinghouse are to reduce or eliminate industrial pollutants through technology transfer, education, and public awareness. PPIC services target federal, state, and local government agencies, industry, and academia, and other entities involved in pollution prevention activities.

Mailing Address:	PPIC U.S. EPA (MC-3404) 401 M Street, SW Washington, DC 20460
Reference & Referral:	(202) 260-1023
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